

# **SENIOR CIVIL ENGINEER**

Exam Code: 7FS02

Department(s): Department of Forestry & Fire Protection

Opening Date: 01/30/2017 Closing Date: 02/10/2017

Type of Recruitment: Departmental Promotional

Salary: MONTHLY-RANGED-SALARY - \$8,810.00 to \$11,026.00

Employment Type: Permanent Full-time

Permanent Part-time
Permanent Intermittent
Limited Term Full-time
Limited Term Part-Time
Limited Term Intermittent

# EEO

The State of California is an equal opportunity employer to all, regardless of age, ancestry, color, disability (mental and physical), exercising the right to family care and medical leave, gender, gender expression, gender identity, genetic information, marital status, medical condition, military or veteran status, national origin, political affiliation, race, religious creed, sex (includes pregnancy, childbirth, breastfeeding and related medical conditions), and sexual orientation.

# **DRUG FREE STATEMENT**

It is an objective of the State of California to achieve a drug-free State work place. Any applicant for state employment will be expected to behave in accordance with this objective, because the use of illegal drugs is inconsistent with the law of the state, the rules governing civil service, and the special trust placed in public servants.

## WHO SHOULD APPLY?

Applicants who meet the minimum qualifications as stated on this bulletin. This is a Departmental promotional examination for the Department of Forestry and Fire Protection.

- 1. Applicants must have a permanent civil service appointment with the Department of Forestry and Fire Protection as of **February 10, 2017**, the final filing date, in order to participate in this examination; or
- 2. Must be a current or former employee of the Legislature for two or more consecutive years as defined in Government Code Section 18990; or
- Must be a current or former non-elected exempt employee of the Executive Branch for two or more consecutive years as defined in Government Code Section 18992; or
- 4. Must be a person retired from the United States military, honorably discharged from active military duty with a service-connected disability, or honorably discharged from active duty as defined in Government Code Section 18991. [Applicants applying under item 4 must provide a copy of their DD214 or other official discharge documents with their Examination/Employment Application (STD. 678)]

For persons who are interested in applying that meet the criteria for either items 2, 3, or 4 above, and examinations are given by more than one Department for the same classification, you must select one Department in which to compete. Once this selection is made, it cannot be changed for the duration of the promotional list established from the examination in which the person participated. Employees may transfer list eligibility between Departments in the same manner as provided for state civil service employees.

## **FILING INSTRUCTIONS**

Final File Date: February 10, 2017

Examination/Employment Application (STD 678) is available at the California Department of Human Resources' website at <a href="State Application">State Application</a>. Examination/Employment Application (STD 678) may be submitted by mail, or delivered in person.

Note: Applications will not be accepted via e-mail.

## MAIL:

Department of Forestry and Fire Protection Examination Unit – (Attention: Susan Dobson) P.O. Box 944246 Sacramento, CA 94244-2460

## **SUBMIT IN PERSON:**

Department of Forestry and Fire Protection Examination Unit – (Attention: Susan Dobson) 1300 U Street Sacramento, CA 95818

Applications postmarked or personally delivered after the final filing date, **February 10, 2017**, will not be accepted for any reason.

Dates printed on Mobile Bar Codes, such as the Quick Response (QR) Codes available at the USPS, are not considered Postmark dates for the purpose of determining timely filing of an application.

# SPECIAL TESTING ARRANGEMENTS

If you have a disability and need special testing arrangements, mark the appropriate box on the application and/or contact the Department of Forestry and Fire Protection at (916) 445-7824.

# **SALARY INFORMATION**

\$8,810 - \$11,026

# **ELIGIBLE LIST INFORMATION**

A Departmental Promotional list will be established for the Department of Forestry and Fire Protection. This list will be abolished 12 months after it is established unless the needs of the service and conditions of the list warrant a change in this period.

# REQUIREMENTS FOR ADMITTANCE TO THE EXAMINATION

All applicants must meet the education and/or experience requirements for this examination by **February 10, 2017**, the final filing date.

All applications/resumes must include "from" and "to" employment dates (month/day/year), time base, and applicable civil service class titles. Applications/resumes received without this information will be rejected.

### MINIMUM QUALIFICATIONS

Possession of a valid Certificate of Registration as a civil engineer issued by the California State Board of Registration for Professional Engineers.

#### and

Experience: Five years of civil engineering, two years of which shall have been in the performance of difficult civil engineering work with responsibilities comparable to those of a project or resident engineer for a large earth moving project, or highway bridge project or in supervising a design squad. (Experience in the California state service to be applied toward this two-year requirement must be comparable to that of an Associate Civil Engineer.)

#### and

Education: Equivalent to graduation from college with major work in civil engineering. (Additional qualifying experience may be substituted for the required education on a year-for-year basis.)

Note: Candidates must provide a copy of your degree or transcripts from a recognized U.S. university or foreign university accredited by the Accredited Institution of Postsecondary Education.

### **POSITION DESCRIPTION**

Plans the work and directs a staff of engineers in the design and preparation of drawings, specifications, and estimates in connection with the construction or maintenance of a wide variety of engineering projects, including buildings, bridges, roads, wharves, piers, dams, levees, ditches, retaining walls, and similar structures; inspects existing water, sanitation, power, and telephone systems and decides what improvements or modifications are necessary; passes on difficult problems, determines the methods of procedure, and personally performs the more difficult phases of the work; supervises the preparation of maps, plans, charts, or diagrams; supervises the maintenance of various engineering records and performs difficult engineering office work in connection with budget preparation, purchases, cost analyses, and progress reports; plans and directs field surveys and varied construction projects; inspects or directs the inspection of structures under construction or repair; makes detailed analyses of proposed projects for the economic as well as the practical engineering phases; analyzes and prepares descriptions of property; makes specialized technical studies and investigations and performs difficult research work; prepares complete and comprehensive reports and makes recommendations on engineering problems.

### **EXAMINATION INFORMATION**

The examination will consist of a supplemental questionnaire weighted 100%. The supplemental questionnaire will include a number of predetermined job-related questions. In order to obtain a position on the eligible list, a minimum rating of 70% must be attained. CANDIDATES WHO DO NOT RETURN A COMPLETED AND SIGNED SUPPLEMENTAL QUESTIONNAIRE ALONG WITH A COMPLETED STATE APPLICATION BY THE FINAL FILING DATE OF FEBRUARY 10, 2017 WILL BE DISQUALIFIED.

Click here for the supplemental questionnaire.

# **KNOWLEDGE, SKILLS AND ABILITIES**

## Scope:

# A. Knowledge of:

- 1. Principles and practices of civil engineering in order to design, write specifications, and perform construction support, design review, and project management.
- 2. Engineering mathematics for accurate structural analysis and design.
- 3. Engineering principles and practices in order to complete inspections, submittal and shop drawing reviews.
- 4. Strength, properties, and choice of construction materials needed in order to evaluate, analyze, and design buildings and other structural elements.
- 5. Quality control in order to ensure completeness and accuracy of design in order to minimize requests for information and/or change orders.
- 6. Surveying to conduct and review field surveys to ensure the accuracy of the data supplied for the project.
- 7. Engineering economics in order to perform value engineering.
- 8. Methods in evaluating and determining alternate site locations for construction projects.
- 9. Research methods in order to consult with headquarters and region staff, write reports, perform value engineering, and conduct specialized technical studies.
- Materials testing and reviewing test reports associated with construction inspection to ensure conformity with project plans and specifications.
- 11. Building Codes in order to design, perform design review, and provide construction support.
- 12. Principles and practices of supervision and management, including a manager's/supervisor's responsibility for promoting equal employment opportunity in recruitment, development, and promotion to maintain a work environment that is free of discrimination and harassment.
- 13. Appropriate action to be taken on acts of discrimination to correct inappropriate behavior.
- 14. The Department's mission, vision, and value statements to carry out the daily activities of the CAL FIRE.
- 15. Common descriptions of real property to ensure the project is within legal limitations.
- 16. CAL FIRE's chain of command to ensure effective operation within the Department.

### B. Skill to:

- 1. Orally and graphically communicate project requirements to staff in order to produce plans, specifications, and reports on a wide variety of civil and structural-related projects.
- 2. Interpret plans and specifications in order to perform inspections and provide construction support.
- 3. Design in order to produce preliminary plans, working drawings, perform construction support, design review, and value engineering on a wide variety of civil and structural-related projects.
- 4. Draft using a variety of drafting equipment, survey equipment, and computer software to produce plans, specifications, and reports on a wide variety of civil and structural-related projects.

## C. Ability to:

- 1. Speak in English to effectively convey information to others.
- 2. Analyze situations accurately and make independent engineering judgments to provide information, take effective action, and resolve engineering problems and construction support issues.
- 3. Perform and understand mathematical computations applicable to engineering, surveying, and design operations in order to produce plans, specifications, and reports.
- 4. Interpret and utilize civil and structural engineering plans and specifications in order to provide design review, construction support, and technical reports.
- 5. Produce written correspondence in English to effectively convey information to others.
- 6. Prepare or supervise the preparation of detailed plans and specifications to be used in the course of construction work.
- 7. Effectively promote equal employment opportunity to maintain a work environment that is free of discrimination and harassment.
- 8. Read and comprehend English to effectively interpret information.
- 9. Communicate effectively both verbally and in writing at a level for successful job performance.
- 10. Train others in the design and preparation of drawings, specifications, estimates, construction inspections, and field surveys to be used in the course of design and construction work.
- 11. Plan and direct the work of engineering and clerical staff to effectively address the Department's projects and operations.
- 12. Utilize effective time management to prioritize workload.
- 13. Communicate ideas and information verbally to staff, stakeholders, agencies, the public, and private entities to ensure successful task completion.
- 14. Effectively listen and comprehend information, ideas, or directives to carry out a specific task.

- 15. Prepare comprehensive reports and make recommendations in order to provide complete and detailed information for management staff to utilize in making decisions.
- 16. Establish and maintain effective working relationships with Federal, State, and Local government agencies, subordinates, consultants, contractors, contractors' employees, and local authorities in order to facilitate good relations between the Department and outside entities.
- 17. Read and understand reference manuals and training materials to ensure competency in a variety of work assignments.
- 18. Traverse through rough terrain in all kinds of weather in order to conduct construction inspections and preliminary site investigations at departmental facilities.
- 19. Anticipate, identify, and resolve issues which may impact the progression of work or assignments in order to meet project schedules.
- 20. Analyze and interpret data to produce technical reports and recommendations on a wide variety of civil and structural engineering issues.
- 21. Access department structures in order to conduct construction inspections and preliminary site investigations.
- 22. Function within a structured chain-of-command environment for successful job performance.
- 23. Evaluate written technical reports to formulate current and long–range solutions and strategies of a specialized or technical nature.
- 24. Assess workload, and resources in order to establish priorities and project schedules.
- 25. Review designs to ensure that designs produced by other entities comply with Building Codes, Regulations, departmental design criteria guidelines, Capital Outlay Budget Change Proposals, and to determine constructability/feasibility of the design on a wide variety of projects.

# **VETERANS PREFERENCE**

Veterans' preference is not granted in promotional examinations.

## **CAREER CREDITS**

Career credits are not granted in promotional examinations.

# CONTACT INFORMATION

Department of Forestry and Fire Protection P.O. Box 944246 Sacramento, California 94244-2460 (916) 445-7824

TDD is Telecommunications Device for the Deaf and is reachable only from phones equipped with a TDD Device
1 (800) 735-2929 (TT/TDD) 1 (800) 735-2922 (Voice)
STS is Speech-to-Speech Service for persons with a speech disability and is reachable at 1 (800) 854-7784 (California) or 1 (800) 947-8642 (Nationwide)

# **DISTINGUISHING CHARACTERISTICS**

### SPECIAL PERSONAL CHARACTERISTICS

Demonstrated supervisory ability.

Persons appointed to a position in this class must have a willingness to comply with the Department policy on employee conduct; willingness to work on a computer for an extended period of time to complete various tasks and assignments; willingness to demonstrate the ability to supervise; willingness to accept multiple projects at a time; willingness to multitask; willingness to maintain current knowledge of tools used in the course of work; willingness to mentor others to encourage staff growth and success; willingness to travel throughout the State to meet the needs of the Department; willingness to maintain current knowledge of manuals, guides, and documents pertaining to job duties; willingness to accept increasing responsibility to meet the needs of the Department; willingness to participate in training sessions to increase technical, administrative, and manipulative skills; willingness to work independently or in a group; willingness to ask for help when needed; willingness to travel long distances during emergency and non-emergency assignments to effectively meet the mission, vision, and values of the Department; willingness to work in high places; willingness to work in inclement conditions to meet the needs of the Department.

### **DISCLAIMER**

Please go to the following website to review the official California Department of Human Resources (CalHR) class specification: <a href="http://www.calhr.ca.gov/state-hr-professionals/pages/3120.aspx">http://www.calhr.ca.gov/state-hr-professionals/pages/3120.aspx</a>.

### **GENERAL INFORMATION**

**Applications are available online** at CalHR, local offices of the Employment Development Department and the testing Department on this job bulletin.

**If you meet the requirements** stated on this bulletin, you may take this examination, which is competitive. Possession of the entrance requirement does not assure a place on the eligible list. Your performance in the examination will be compared with the performance of the others who take this test, and all candidates who pass will be ranked according to their scores.

The testing Department reserves the right to revise the examination plan to better meet the needs of the service, if the circumstances under which this examination was planned change. Such revision will be in accordance with civil service laws and rules and all competitors will be notified.

**General Qualifications:** Candidates must possess essential personal qualifications including integrity, initiative, dependability, good judgment, and ability to work cooperatively with others; and a state of health consistent with the ability to perform the assigned duties of the classification. A medical examination may be required. In open examinations, investigation may be made of employment records and personal history and fingerprinting may be required.

**Eligible Lists:** Eligible lists established by competitive examination, regardless of date, must be used in the following order: 1) sub-divisional promotional, 2) Departmental promotional, 3) multi-Departmental promotional, 4) service-wide promotional, 5) Departmental open, 6) open. When there are two lists of the same kind, the older must be used first. Eligible lists will expire in one to four years unless otherwise stated on the bulletin.

**Promotional Examinations Only:** Competition is limited to employees who have a permanent civil service appointment and military veterans that meet all the minimum qualifications. Under certain circumstances, other employees may be allowed to compete under provisions of Rules 234, 235, and 235.2. State Personnel Board Rules 233, 234, 235, 235.2, and 237 contain provisions regarding civil service status and eligibility for promotional examinations. These rules may be reviewed at Departmental personnel offices or <a href="www.jobs.ca.gov">www.jobs.ca.gov</a>.

**Felony Disqualification:** You are disqualified from being employed as a peace officer if: 1) you have been convicted of a felony in California or any other State; 2) you have been convicted of any offense in any other State which would have been a felony if committed in California; 3) you have been charged with a felony and adjudged by a superior court to be mentally incompetent; 4) you have been adjudged addicted or in danger of becoming addicted to narcotics, convicted, and committed to a State institution. If you have been convicted of a felony, you may be allowed to participate in this examination if your conviction(s): 1) has/have been sealed under Penal Code Section 851.7, 851.8, 1203.45, or Health and Safety Code Section 11361.5; 2) has/have been expunged or is/are expugnable pursuant to Health and Safety Code Section 11361.5 regarding marijuana offenses; 3) was/were stipulated or designated to be a lesser included offense of marijuana possession under Health and Safety Code Section 11557 or 11366.

Confidentiality and Security: Pursuant to Government Code Sections 19680(c) and 19681(b) it is unlawful to copy and/or furnish confidential examination material for the purpose of either improving or injuring the chances of any person or to obtain examination questions or other examination material before, during, or after an examination. Every person violating these provisions is guilty of a misdemeanor, and adverse action will be pursued. This may result in the person being barred from competition in future examinations, withheld from certification lists or cancellation of eligibility for employment in State civil service.